

IDRC project: Community Action Workshops to Strengthen the Capacity of Community Groups to Undertake Local Sustainable Development Initiatives in Mexico.

Final Report

April 2004

Pronatura, A.C. Veracruz and Harmony Foundation

In May 2003 IDRC approved a project to Harmony Foundation and Pronatura Veracruz to update the Foundation's Community Action Workshops materials and implement them in three communities of the Alvarado region in Southern Veracruz. In preparation for the project communities were identified for participation, and a couple of planning meetings were held to gain a local perspective from people about the issues they faced.

Goals of the project were:

- 1) To refine and update the adaptation and translation of Harmony Foundation's (HF) Community Action Workshop Manual (CAWM) Spanish language version to conform to the most recent English version.
- 2) To assist group leaders representing three rural communities in the municipality of Alvarado in the state of Veracruz to organize, deliver and adapt a Community Action Workshop (CAW).
- 3) To use the workshop(s) and follow up activities to identify community needs and adopt plans for local projects which protect the local ecology and improve local economic opportunities.
- 4) To pilot the local project plans.

Results for each of the goals are described below:

Goal 1: To refine and update the adaptation and translation of Harmony Foundation's (HF) Community Action Workshop Manual (CAWM) Spanish language version to conform to the most recent English version.

The Manual was updated and proven useful with four community groups in the Alvarado Municipality, Veracruz. The updated final version of the Manual represents Annex 1 of this report (Submitted separately).

The description of how to facilitate activities was found to be the very useful, yet some minor adjustments were applied based mainly on the amount of writing required. The Manual was used with women from rural communities whose writing skills are minimal. Although they assigned a secretary, they took a long time writing the results which concerned some of the women. In order to address this issue it is recommended, where literary skills are limited, to assign someone who can quickly record results for the group from each of the exercises.

Goal 2: To assist group leaders representing three rural communities in the municipality of Alvarado in the state of Veracruz to organize, deliver and adapt a Community Action Workshop (CAW).

Community Action Workshops and project piloting activities were delivered by Pronatura staff, together with women representing different groups from communities of Costa de la Palma, Los Cántaros and La Playa, all in the municipality of Alvarado. Annex 2 includes a brief description of each of the communities.

One strength of the workshop Manual is that it can either be conducted over 2 consecutive full days or, taking advantage of its modularized format, it can be delivered in parts over a larger number of smaller sessions.

Workshops were delivered over a total of 12 sessions taking advantage of the modularized format of the workshops (5 sessions were dedicated to the activities of the Manual and compilation of information and 7 sessions combined planning, training and project piloting. We chose this approach because our audience was comprised of working women from rural communities who also provide family care and do not have the support systems available in cities.

Workshops were also combined with some training and project piloting, thus increasing the time of delivery.

The first and second workshops – continuation of the pilot planning sessions - were done with four small groups: 10 women (wives of farmers and single women from Costa de la Palma), 5 women (wives of clam fishermen in Costa de la Palma), 14 women of La Playa and 10 women at Los Cantaros. There were 39 women who participated on and off throughout the workshops and project piloting (with an average of 25 people at each of the workshops and activities). The first and second workshops were to obtain a detailed identification of current issues faced by the communities, prioritize them and recognize their causes and effects as well as an expression of ideas on how best to face those issues. During a fifth workshop results were consolidated and put into the action plan format, including creating Community Profiles, e.g. identifying the issues, community impacts, community strengths, and purpose. The last three items were done focusing on one of the issues faced.

The third and sixth workshop focused on attending to one of the women's worries: organic and inorganic waste management. Regarding inorganic waste the women participated in a beach and road clean-up of their communities. With respect to organic waste they had two workshops; one concentrated on composting and the second on building vegetable gardens.

A fourth and seventh workshop was held with a focus on aquaculture, including site cleaning, floating cage building, fish seedling and maintenance, water quality measurement and activities to cope with changes in water quality. Training was provided by Pronatura staff and Colegio de Postgraduados

An eighth and ninth workshop focused on reforestation, including where to plant different varieties of trees and preferred types. Training and support for the groups to participate in foresting efforts was provided by the Dirección General de Desarrollo Forestal – SEDARPA. These workshops allowed the women to learn all aspects of planting and maintaining cedars and mangrove trees.

Participants subsequently met for two shorter sessions (10 and 11) to discuss their 2004 activities, to follow-up on previously initiated projects, and complete and organize community action plans.

Five leaders were identified during the workshops and follow-up activities. At Costa de la Palma the leaders are: Sra. Eloisa Figueroa Enriquez, who also helps the local doctor and is the force behind community organization (and a delight to work with), and Sra. Bertha Figueroa Palacios who is the secretary of the Comité Ejidal. At Los Cantaros the leaders are Sra. Nicolasa Figueroa who also administers a local store and Sra. Margarita Figueroa who works at home with her children. At La Playa, the leader that has emerged is Sra. Socorro Espinoza Jimenez who also is the education promoter in the community.

Sra. Socorro Espinoza, along with Pronatura project coordinator Luisa Tiburcio, participated in a conference where they discussed the workshops and community projects completed by them, in an event held in the Port of Veracruz as part of the celebration of the Women International Day (March 8th). The event “Mujer y Biodiversidad” organized by the state representation of the federal environmental ministry (SEMARNAT) had a total of 12 speakers, and was attended by approximately 150 people. It was a very emotive event where women shared their passion for their families, communities and environment, and agreed on how “everything is possible” when there is organization. They were very grateful for Canada’s friendship and support through Harmony and IDRC.

On April 14, during the state TV program “Veracruz Agropecuario”, partners from SEDARPA referred to the work of the women from the three communities as one of their important liaisons and reiterated their support for reforestation activities.

Goal 3: To use the workshop(s) and follow up activities to identify community needs and adopt plans for a local project which protect the local ecology and improves local economic opportunities.

Community issues, recognition of their causes and effects, as well as preliminary ideas to address are included in Tables 1 and 2.

Throughout the project the Community Action Workshop project plans were filled-in by the four groups (the two groups of Costa de la Palma joined in one). A total of 11 action plans were developed (some of them with more detail than others). Annex 3 includes each of the project plans.

At Costa de la Palma, women prepared four action plans: 1) Vegetable growth in community gardens; 2) Growing and commercialization of watermelon; 3) Water Lily Arts and Crafts, and 4) Sustainable use of wetlands products (fruits). The first action plan was implemented and is now underway; the second started with the seed acquisition in April; the third is partially completed, and the fourth is a plan to be initiated in 2004 or 2005 (depending on funding and fruits selected).

At La Playa, women prepared four action plans: 1) Aquaculture –Tilapia growth on floating cages; 2) Native crab and fish growth; 3) Vegetable growth in community gardens; 4) Water Lily Arts and Crafts. The first and third action plans were implemented, the second and third are partially underway and the goal now is to find funding to allow this important work to continue.

At Los Cantaros, women prepared three action plans: 1) Vegetable growth in community gardens; 2) Aquaculture –Tilapia growth on floating cages; 3) Water Lily Arts and Crafts. The first and second action plans were implemented and are currently underway, the third is partially underway and funding being sought to allow this important work to continue.

Goal 4: To implement the local project plans.

Community project piloting started immediately after the first community needs were identified. This was very important as women were able to see and touch the results in the short-term which kept them motivated. In general many rural communities are tired of the government making promises and doing very little in action, thus the importance of combining planning with action. Throughout the project timeline community projects became more complex and required more organization and follow-up. It was beneficial to start with a “small” project so the women could develop trust and build on organizational skills which allowed them to manage more tasks and resources.

Implemented projects included:

1) *Vegetable growth in community gardens.* A total of 32 women and men built vegetable gardens: 12 women in Costa de la Palma, 6 women and 3 men in Los Cantaros and 8 women and 3 men in La Playa. Right now there are three community gardens functioning, and four of the women also have their own gardens at home. The women received the first batch of seeds from a government program of the Alvarado Municipality which distributed seeds, along with a bucket of chemical fertilizer. However, the women did not use the chemical fertilizer and planted everything organic using their own compost. They have harvested organic squash, cucumbers, watermelon, chilies, radish, and papaya. The first harvest was about 60% successful due to the low quality of the seed, and some natural disasters (too much rain). The second batch of seeds was bought with this project support and a higher rate of success is expected because of the better quality of seeds and the timing of the planting. Women expect to harvest again in late May/June. Two women will participate in training in agro-ecological techniques at Rancho Agroecologico Las Cañadas to further enhance their skills and knowledge.

2) *Aquaculture.* Twenty three women and four men participated by clearing branches/tracks of river beds; building fences around them so water lilies do not cover them; building floating cages and seeding and maintaining fish. Six cages are currently being used at La Playa (some women from Costa de la Palma who do not have waterfront integrated themselves to La Playa group for this project), and 4 at Los Cantaros. Secretaría de agricultura, ganadería, desarrollo rural, pesca y alimentación (SAGARPA) (Ministry of Agriculture, Ranching, Rural Development, Fisheries and Food Administration) donated 900 alevins (young fish) of Nile

tilapia (*Tilapia nilotica*) for their first harvest, to be collected in July/August 2004. Although Nile tilapia is an exotic species they were chosen for the first seedling because of: 1) their availability as donated fish; 2) their ease of growing, allowing women's groups to gain experience and finish organizing themselves so when a more delicate species is cultivated they already have security and maintenance systems in place; 3) their local acceptance as food source and, 4) the possibility of obtaining fish which are unable to reproduce. Very strict measures of safety with double cages are being applied so there is no possibility the fish can escape within the system, and even if such an unfortunate event were to occur, there will be no harm to the lagoon system since they are all unable to reproduce. On a second phase more cages are being built and we are investing in the purchase of alevins of native species: Blackstripe Cichlid (*Cichlasoma fenestratum*), Mexican mojarra/Mayan Cichlid (*Cichlasoma urophthalmus*), Redhead Cichlid (*Cichlasoma synspilum*) and Red Bay Snook (*Petenia splendida*), all native species whose natural populations are declining and with high market value. These fish are expected to be harvested in November/December 2004. Additional negotiations are being sought with the Consejo de Desarrollo del Papaloapan for them to partially support mixed fisheries that include common rangia or clam (*Rangia cuneata*) and Blue Crab (*Callinectes sapidus*). Further training to prepare their own fish food (fish pellets) is being sought with the Centro de Estudios Tecnológicos del Mar (specialized school in fisheries). The pellets are prepared with fish entrails, which currently are just thrown away, so using them to prepare food will have a double impact: reducing lagoon systems pollution and reducing costs for fish growth.

3) *Reforestation*. 7,000 cedars were planted by community members on the edge of their "potreros" (cattle ranching plots). Cedar was chosen because they are trees that survive harsh conditions and are trees that in 15 years can be harvested for hard wood. Forestry activities were done at La Playa and Costa de la Palma. Women and children from Los Cantaros also wanted to participate, but since they do not own land, they had to plant in another community so joined the group of Costa de la Palma. Thirty children from the Secondary school planted 1,000 trees on the school and its surroundings, the rest of the trees were planted by 41 women, men and children from the three community groups. In 2004 they plan to do reforestation with mangroves at the edge of the lagoon system.

4) *Water lily management through arts and crafts*: Water lilies have become a pest in the Alvarado lagoon system. Their growth is explained by the high organic content of the water and they have become a problem for the ecosystem and the community. Their presence in the lagoons reduces oxygen availability to other plants and animals (relating to the problem of reduced fisheries), and increases the difficulty of beach access for the communities. With support from Pronatura's private lands management program, seven women from Costa de la Palma and La Playa attended a workshop on private lands legal conservation mechanisms in Catemaco (Southern Veracruz). As part of the workshop we were able to visit a community group close to Catemaco where women already do arts and crafts with dried water lilies. The exchange was superb; Alvarado women were completely fired up by the process and the skills of Catemaco women and have started experimenting on their own with the water lilies. In addition two women from Costa de la Palma and La Playa and the project coordinator from Pronatura participated in a workshop in Catemaco related to arts and crafts management and administration, gaining additional skills in order to fully implement this project.

Annex 4 includes a photographic memory of the different workshops and projects.

Project follow-up:

Many of the on-going follow-up activities will continue until September 2004 with some assistance from the North American Wetlands Conservation Act (NAWCA). However, further support is needed in order to:

- 1) Continue to assist the communities with the projects they have implemented and to pursue further projects they would like to do. This will be emphasized after September 2004 when all available funding for follow-up visits will expire.
- 2) Bring into the communities an instructor from another community in Catemaco to provide training in the quality production of arts and crafts of water lilies, as well as commercial marketing structure that allows them to sell their products at a fair price.
- 3) Training in fish food preparation.
- 4) Build and support management of a community center and ecotourism facilities at a plot which Pronatura will acquire in 2004 (Summer) at La Playa, where women and men from the community will be leaders of the on-site activities.

Final thoughts and lessons learned:

Group participation in the workshops and projects contributed to strengthen community relationships, increase the confidence of the women involved, and of course produce tangible results such as vegetables which women are now sharing among themselves and their families, fish that enhance their diet and trees that will provide shade, retain soil, provide shelter and add an aesthetic value to their land. It is the combination of these intangible and tangible results which make a community stronger.

Some of the key lessons learned through this project piloting are:

Women in leadership: Working with women's groups is, besides being very inspiring, very effective. Women are in general more family and community oriented, thereby more willing and able to combine their household duties with communal activities to benefit their own and their children's livelihood. One needs just to understand and adapt to their time management requirements in order to achieve consistent results. Projects led by women also provide room and space for male participation. Although not all of the men participate, there is a great deal of interest and they look for ways to integrate their skills in order to help build better community for their families.

Planning and action: It is important to combine planning with actual project piloting. We found that it was difficult for the participants to focus for more than three hours; people from Alvarado are very lively and they are more used to doing than planning, so we found it best is to combine planning activities with more hands-on activities.

Communication: Finding the right ways to communicate ideas, either verbally, with drawings or "by doing" is crucial to achieve involvement of all the participants. We each have different

ways of processing information, and different means need to be used to assure everybody understands and feels part of the process.

Timing: In the Tropics, weather conditions strongly influence people's activities. Many of the activities planned for certain times of the year have had to be rescheduled because of weather conditions. 2003 in particular was a very rainy and windy year, so people's health and priorities were related to the seasons.

Cooperation: It is just by looking for ways to complement our efforts that a larger impact could be achieved. As part of this project Pronatura staff and community members have sought contact and support from different agencies. These efforts should continue to assure a long-term effect on the conservation of the Alvarado Wetlands.

Continuity: Participation of Pronatura staff accompanying the communities and community leaders facilitating some of the workshops and activities was crucial. Continuous presence in the area assures a level of trust and confidence, both in the organization personnel and in the targeted audiences. It also provides for continuous enhancement of activities and imprints and additional spirit of success.

Respect: Acknowledging and respecting the knowledge each person and group brings to a process was a key to the success of the project. Each staff member and volunteer has a specific set of knowledge and ability that if respected will enhance the results of the project. Equally important was to recognize and respect the knowledge of the wetlands communities. They above all, know the conditions of their environment, understand the close relationship that there is between the well being of nature and humans, know the native and exotic species and their rate of disappearance/appearance, know the problems they and their environment are facing and have good ideas to deal with them. It is by combining everyone's knowledge and skills that good resource management will result in long-term conservation and a better quality of life.

Table 1. Main issues identified per community, along with their causes and effects.

Community	Main issues	Causes	Effects
Los Cantaros and Costa de la Palma	Less fisheries	<ul style="list-style-type: none">• Competition• Greed• Dragging techniques	<ul style="list-style-type: none">• Less fish• Extraction of smaller clams• Economy• Some species have disappeared
	Water pollution	<ul style="list-style-type: none">• Garbage• Dead fish• Defecate outside• Upstream factory pollution	<ul style="list-style-type: none">• Sickness• Death of fish• Economy
	No potable water	<ul style="list-style-type: none">• Bad hygiene practices	<ul style="list-style-type: none">• You cannot drink• Sickness

		<ul style="list-style-type: none"> • People not interested 	<ul style="list-style-type: none"> • Potable water far • Economy
La Playa	Less fisheries	<ul style="list-style-type: none"> • Too many fishermen • Dragging techniques. • Inadequate nets • Capture of small species 	<ul style="list-style-type: none"> • No production techniques • Economy • No food for fish • People migration
	No respect to fishing restriction time tables	<ul style="list-style-type: none"> • People do not respect timetables • No other economic/job alternatives. • No consciousness and respect 	<ul style="list-style-type: none"> • Disappearance of species • “fish for today, hunger for tomorrow” • Authority abuse
	River and water pollution	<ul style="list-style-type: none"> • Dumping of garbage in the river • Waste water from Alvarado • Upstream factory pollution 	<ul style="list-style-type: none"> • Sickness • Dying fish • Poverty • Less food • Bad odors • Non desired animals
	Erosion caused by rain around houses and beaches	<ul style="list-style-type: none"> • Beach erosion from waves. • Strong rainfall • Weakness of the soil 	<ul style="list-style-type: none"> • Garbage • No beach • Destruction • Expenses • Accidents

Table 2. Ideas for actions to be held to face some of the environmental issues that communities face:

Issue	Ideas to face it
Less fisheries	Implement aquaculture techniques: “encierros rusticos” – floating fish cages-
	Find a good place to putt hem into,, get the netting, build a fence, get the fish and food for them
	We need to work together to do what we are thinking of
	We will find a place where to sell them
	To denunciate the dragging, we will seek for the major authority in the community to go with us to the fisheries delegation or to PROFEPA.
	Have experts come to advice us about the issue and how to face it.
	Do adds that indicate the fisheries time table and denunciate people that brake them

River pollution	Do not through garbage in the river
	Prepare awareness campaign with adds that says that dumping garbage is prohibited, inviting people to gain consciousness not to through garbage
No potable water	We need to boil ante water or add chlorine
	We need to organize ourselves to build the potable water well
Mangrove cutting	Put ads that say why the mangrove is important and saying that it is prohibited to cut it.
Garbage	Do a beach clean up
	Do not dump garbage on the roads or in the street
	Put signs that ask not to dump garbage
	Put garbage deposits
	Build a garbage dump
	Learn how to do composting to reduce organic waste
Erosion	Reforest with mangrove or other trees

ANNEX 1. Community Action Workshop Manual (CAWM) Revised Spanish language version. (Hard copy - provided as a separate document)

ANNEX 2. Community descriptions

Costa de la Palma Community

It is located in the southwest side of the Alvarado lagoon, bounds with the community of Moral and Mosquitero as well as with Blanco River. The prevailing weather is the tropical rainy.

The existing vegetation consists of: mangroves, avocado trees, “uveros”, gumbo limbo, cat-tails and “cornizuelos”. The fauna includes: parakeets, social fly catchers, nightjars, iguanas, herons, ground-doves, fox, anteaters, “tepezcuintles”, raccoons, rabbits, hawks, falcons, etc.

The community is connected with the other communities and with the nearest city at the same time, by one road, which is very important for the community since it is the only channel of communication they have.

The population basically cultivates corn, yucca, sweet potato and fruit trees, such as: mango, avocado, “nanche” and “jobo”. Most of the people continue to fish while the sown lands are being made ready for harvesting, but in recent years cattle ranching has increased enormously.

The people are kind and respectful; they are inviting and festive, friendly and direct.

Los Cántaros Community

The community of Los Cántaros is located near the communities of Costa de la Palma, Playa and the Blanco River. It is one of the communities more confined within the wetland, surrounded by a thick covering of mangrove. This benefits the community since the mangroves provides protection from cyclonic winds, and it provides a rich food source, because mangroves are a refuge of many species, principally aquatic.

This community is formed by approximately 13 families, with fishing being their primary activity. They intensively cultivate clams and “chucumite” fish, to mention some of the species. Very few of them practice agriculture or cattle ranching, mostly because their lands are frequently flooded, so the sown land is taken away by the water and the cows don’t have grass to feed on.

There are two ways to get to Los Cántaros, one of them is a rural road that communicates Los Cántaros with the other communities and Alvarado; and the other is a waterway through the Blanco River, this latter being the faster way.

The people are inviting, smiling, humorous and very direct. They like to work and are very friendly.

The thick covering of mangrove that surrounds the community lodge an endless number of animals and plants, such as white, red and dark mangrove, cat-tails, “cornizuelo”, nightjars,

ground-doves, gulls, clams, “chucumites” fish, manatees, fox, cardinals, ospreys, pelicans, duck, palms, gulls and terns, etc.

La Playa Community

The community of La Playa is formed by approximately 14 families, each consisting of five members in most of the cases. The community is located within one of the most important wetlands in Mexico. It is located on the edge of the Alvarado lagoon, surrounded by the communities of Costa de la Palma and Los Cántaros.

The community is connected with the other communities and the nearest city, Alvarado, by two ways; one of them being a rural road and the other one a waterway. Using the rural road, the estimated time of arrival to the nearest city, Alvarado, is approximately 1 hour. The waterway is faster; it goes through the Alvarado lagoon and takes 15 minutes.

The primary activity of the community is fishing, 95% of the families fish because the terrestrial surface doesn't permit other activities such as agriculture or cattle ranching because the soil is mainly sandy and consequently it is not productive enough.

Despite the poverty, the people of this community are inviting, festive, optimistic and generous.

The flora which surrounds the community is that characteristic of a wetland, composed in the main by a vegetation of: white, red and dark mangrove, cat-tails, palms, “uveros”, gumbo limbo, “cocuite” and “cornizuelo”. The existing fauna is varied, composed of an endless number of species such as raccoons, anteaters, “tepezcuintles”, armadillos, coyotes, iguanas, swallows, ground-doves, hawks, mockingbirds, cardinals, crabs, shellfish, white shrimp, manatees, etc.

The prevailing temperature in the community is 38 °C in the shade. Cyclonic winds affect the community during the year, and the rainy period occurs during the months of May, August and September. The winds represent a serious problem for the community because they don't permit the people to accomplish their primary activity, fishing.

ANNEX 3. Summary of Project Plans

(Project Plans - entire Spanish language version - See Separate Document)

Project plans include activities for the remainder of 2004 and for 2005. All projects are aimed to increase community member's quality of life giving the best sustainable use to their natural resources. Some of the community projects were piloted during the length of this proposal, some were partially begun and some are planned to begin later in 2004. Further funding is being sought to fully implement these plans.

Following is a summary of the plans for each project. Annex 3 describes the specific activities and responsible people (plans in the Annex are of course in Spanish since they were developed by the community members with support from Pronatura staff). Plans for the same projects developed by the different communities are very similar so the summaries are presented by plan, specifying which communities apply to each. Many plans might seem simple, and most likely they could be further complemented with the aid of a specialized technician, but we wanted to honor community member's ideas and just slightly complement them, until we can assure that during implementation they have technical.

1. Vegetable growth in community gardens (Costa de la Palma, La Playa, Los Cantaros). Activities were suggested within three main categories:

- 1) Planning and training: Group organization, training in composting and vegetable gardening, seed selection and acquisition;
- 2) Field work activities: Compost preparation and follow-up, plot selection and cleaning and soil removal and fertilization using compost, bed preparation, seed nursery preparation, moving small plants to definite beds, watering and weeding, crop harvest;
- 3) Follow-up: Follow-up during project and start again next season applying lessons learned.

2. Growing and commercialization of watermelon (Costa de la Palma).

- 1) Planning: Work meetings, equipment and interested people inventory, plot selection, contact with possible purchasers, task division;
- 2) Field work activities: Plot delineation, cleaning and preparation, land fertilization with compost watermelon seed acquisition, seed nursery preparation, moving small plants to definite beds, watering and weeding, vigilance and control against pests or plant sicknesses, harvest;
- 3) Commercialization: Product distribution both for self-consumption and for commercialization in Alvarado and follow-up.

3. Water Lilies Arts and Crafts (Costa de la Palma, La Playa, Los Cantaros):

- 1) Planning and training: Group organization, equipment and interested people inventory, task division, obtain advise on forming a co-op and do all necessary paper work, search for training opportunities, contact for product commercialization, seek advise on promotion of product;
- 2) Field work activities: Plant selection, harvesting, cutting, cleaning, fiber extraction and drying; wood acquisition for molds, mold preparation, weaving of fibers;
- 3) Quality control and commercialization: Work meetings, inventory of finished products, keeping system of the product, product commercialization and income distribution;

4) Follow-up: Work meetings, exchanges with other groups, other groups training.

4. Sustainable use of wetlands products – fruits (Costa de la Palma):

1) Planning: Recognition and selection of potential products, e.g., different types of fruits to be processed, technique selection to process product (e.g., creating fruit sugar syrup, dehydrating fruits), search for contacts to provide training on any of these techniques, task distribution, equipment and interested people inventory, contacts for commercialization;

2) Product processing: necessary equipment acquisition (e.g., jars, sugar, pressure pots), fruit selection, cleaning and storage, fruit processing through different techniques, e.g., a) Fruit syrup: Fruit washing and selection for cooking, fruit syrup preparation, sterilizing and jar sealing, labeling, storage; b) Fruit dehydrating: Fruit washing and selection, fruit slicing, dehydrating, packing, labeling and storage;

3) Commercialization and follow-up: Fruit commercialization, continuous care of fruit trees, planting more fruit trees for long term use.

5. Aquaculture –Tilapia growth on floating cages (La Playa, Los Cantaros):

1) Planning: Group conformation, site and technique selection, planning of the technical procedures to grow fish, obtaining permits, asking for owner's permit to use a little water bay, search for additional support from other local entities, receive training on floating cages building and usage, create a revolving fund to get additional materials in the future, task distribution;

2) Field work activities: bay cleaning and building of fences to protect bay from garbage and water lilies coverage, obtain materials and build floating cages, ask for alevins to do first fish seedlings, alevin reception and seedling, food acquisition, cage vigilance and feeding of fish, cage cleaning and maintenance, separation of fish in two cages once they have grown – three times according to fish size-, fish harvest and distribution among participating community members;

3) Follow-up: Continue relationships with other entities for continuous support and training on other aquaculture techniques, and training on fish food preparation (e.g. earth worms growing and food preparation, fish entrails flour).

6. Native fauna management through soft shell crab and mixed fish and crab growing (la Playa): Strengthening relationships with Consejo de Desarrollo del Papaloapan (state governmental institution) who have offered technical support to establish a module for mixed fish and crab growing, preparing all the paper work needed and file in the request, once the project is approved get the needed training and implement the project according to technician recommendations.

ANEXO 3

PLANES DE ACCION COMUNITARIA

Planes de acción comunitaria del grupo de mujeres de: Costa de la Palma, Alvarado.

El presente documento agrupa los diferentes proyectos que el grupo de mujeres de la comunidad de Costa de la Palma tiene como objetivo desarrollar durante el 2003 y 2004, buscando dar un mejor uso a sus recursos naturales e inculcar en los pobladores del humedal una conciencia de respeto hacia la flora y fauna que en estos viven, a través de experimentar diferentes alternativas que permitan contrarrestar el impacto que se esta teniendo en el humedal de Alvarado, Ver.

El grupo de mujeres considera valioso continuar con actividades desarrolladas durante el 2003 e incluir nuevas iniciativas. Los planes presentados incluyen proyectos de:

1. Cultivo de hortalizas
2. Cultivo de sandia
3. Elaboración de artesanías con el lirio acuático
4. Aprovechamiento de productos del humedal.

Cabe mencionar que aunque en estos planes no se presentan el manejo de productos pesqueros, algunas personas de esta comunidad se encuentran colaborando con el grupo de La Playa.

Plan de acción comunitaria del grupo de mujeres de Costa de la Palma

Proyecto: CULTIVO DE HORTALIZAS

TAREA	RESPONSABLE	FECHA
PLANEACIÓN.		
<i>Organización del grupo</i>	Berta, Eloisa	Enero de 2003
<i>Capacitación en composta</i>	Luisa y expertos externos	Julio 2003
<i>Capacitación en el cultivo de hortalizas</i>	Luisa y expertos externos	Agosto 2003
<i>Selección de especies a cultivar</i>	Todo el grupo	Agosto 2003
<ul style="list-style-type: none"> Adquisición de la semilla 	Teofila, Luisa	Agosto de 2003 Abril 2004
ACTIVIDADES DE CAMPO		
<i>Elaboración de abono orgánico para las hortalizas</i>	Todo el grupo	Julio de 2003
<ul style="list-style-type: none"> Capacitación para la obtención de composta 	Luisa	Julio de 2003
<ul style="list-style-type: none"> Acopio de materia orgánica y material requerido 	Luisa	Julio de 2003
<ul style="list-style-type: none"> Desarrollo de la técnica de compostaje 	Todo el grupo	Julio de 2003
<ul style="list-style-type: none"> Vigilancia y seguimiento del proceso de compostaje 	Todo el grupo	Julio de 2003
<i>Preparación del terreno</i>		
<ul style="list-style-type: none"> Selección del terreno para la elaboración de las hortalizas 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Desmonte y limpieza del terreno en para cultivo 	Todo el grupo	Por lo menos cada 15 días
<ul style="list-style-type: none"> Resguardo del terreno 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Preparado de la tierra para hortalizas 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Abono de la tierra 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Elaboración de las camas para la siembra de hortalizas 	Todo el grupo	Agosto de 2003

<i>Elaboración de almácigos</i>	Teofila, Berta, Irma	
<i>Trasplante de las plántulas</i>	Todo el grupo	Agosto de 2003 Noviembre 2003 Mayo de 2004
<ul style="list-style-type: none"> Selección de las plántulas más resistentes 	Todo el grupo	Septiembre 2003 Diciembre 2003 Mayo 2004
<ul style="list-style-type: none"> Seccionado del almacigo 	Teofila, Berta, Irma	
<ul style="list-style-type: none"> Cuidado de las plántulas 	Teofila, Berta, Irma	
<i>Cultivo de hortalizas</i>		
<ul style="list-style-type: none"> Desarrollo de la técnica de cultivo de hortalizas 	Todo el grupo	
<i>Regado de las plántulas</i>	Todo el grupo	Durante todo el proceso
<i>Monitoreo del crecimiento</i>	Todo el grupo	
<i>Reunión de avances y retroalimentación de grupos</i>	Berta, Eloisa	2 mensuales
<i>Cosecha de los diferentes hortalizas</i>	Todo el grupo	De acuerdo a periodo de siembra
SEGUIMIENTO DEL PROYECTO		
<i>Seguimiento del desarrollo del proyecto</i>	Todo el grupo	
<i>Búsqueda de nuevas alternativas</i>	Luisa y el grupo	

Plan de acción comunitaria del grupo de mujeres de Costa de la Palma

Proyecto: CULTIVO DE SANDIA

TAREA	RESPONSABLE	FECHA
<i>PLANEACIÓN</i>		
Reunión de trabajo	Teofila,	2 cada mes
Organización del grupo	Teofila, Berta, Eloisa	Enero 2003
Inventario de materiales y mano de obra (con que cuentan y no cuentan)	Marcela	Mayo 2004
Selección del terreno	Teofila	Marzo y Abril 2004
Contacto para comercialización del producto	Luisa, Teofila, Manuela	Junio 2004
Asignación de tareas	Luisa, Eloisa	Junio 2004
<i>ACTIVIDADES DE CAMPO</i>		
Limpieza del terreno	Todo el grupo	Octubre 2004
Trazado del terreno	Todo el grupo	Octubre 2004
Preparación del terreno	Todo el grupo	Octubre 2004
Elaboración de abono orgánico	Todo el grupo	Abril 2004
Adquisición de la semilla de sandia	Luisa, Teofila	Abril 2004
Fertilización del terreno	Todo el grupo	Octubre 2004
Preparación y siembra de almácigos	Teofila, Ramona, Erika	Octubre 2004
Siembra de la plántulas del almacigo al campo	Todo el grupo	Noviembre 2004
Actividades de producción de la sandía y mantenimiento del cultivo	Todo el grupo	De Nov. 2004 a Feb. 2005
Riego	Todo el grupo	De Nov. 2004 a Feb. 2005
Limpieza y chapeo	Todo el grupo	De Nov. 2004 a Feb. 2005
Vigilancia de plagas y enfermedades	Todo el grupo	De Nov. 2004 a Feb. 2005
Control de plagas y enfermedades	Todo el grupo	De Nov. 2004 a Feb. 2005
<i>Comercialización</i>	Todo el grupo	
Cosecha de la sandia	Todo el grupo	Feb/Marzo

		2005
Distribución del producto	Todo el grupo	Feb/Marzo 2005
Consumo local	Todo el grupo	Feb/Marzo 2005
Venta del producto	Todo el grupo	Feb/Marzo 2005

Plan de acción comunitaria del grupo de mujeres de Costa de la Palma

Proyecto: ELABORACIÓN DE ARTESANIAS CON LIRIO ACUÁTICO

TAREA	RESPONSABLE	FECHA
Organización del grupo	Berta, Eloisa	Abril 2004
Inventario de material y mano de obra existente	Berta, Eloisa	Abril 2004
Asignación de tareas	Berta, Eloisa	Mayo 2004
Asesoría para conformación de cooperativa	Teofila, Socorro	Marzo 2004
Conformación de cooperativa	Luisa, Berta, Eloisa	Mayo 2004
Contacto para comercialización del producto	Luisa y Eloisa	Mayo de 2004
Promoción y difusión del producto		Abril de 2004
Búsqueda de contacto con expertos en elaboración de artesanía	Luisa, Eloisa, Socorro	Abril, mayo de 2004
Capacitación para la elaboración de artesanía	Grupo experto	Mayo/Jun 2004
Selección de la plantas	Teofila, Marcela, Bertha	Abril, mayo 2004
Extracción de la planta	Teofila, Marcela, Bertha	Abril, mayo 2004
Cortado de la planta	Todo el grupo	Abril, mayo 2004
Limpieza de la planta	Todo el grupo	Abril, mayo 2004
Extracción de la fibra de la planta	Todo el grupo	Abril, mayo 2004
Secado de la planta	Todo el grupo	Abril, mayo 2004
Herborización de las plantas	Todo el grupo	Abril, mayo 2004
Adquisición de maderas para moldes	Manuela, Erika	Abril, mayo 2004
Elaboración de moldes para artesanías	Cruz,	Abril, mayo 2004
Desarrollo de técnica de tejido de artesanías	Todo el grupo	Mayo de 2004
Reuniones de trabajo	Eloisa, Bertha	Dos por mes
Control de calidad del producto	Manuela, Teofila	A partir de jun.
Inventario de productos terminados	Erika, Bertha	Junio
Comercialización del producto	Todo el grupo	A partir de jun.
Intercambio de experiencias con otros grupos	Todo el grupo	Septiembre
Resguardo del producto terminado	Todo el grupo	Junio
Capacitación a grupos locales	Berta, EloisaManuela	Noviembre

Plan de acción comunitaria del grupo de mujeres de Costa de la Palma

Proyecto: APROVECHAMIENTO DE PRODUCTOS DEL HUMEDAL

TAREA	RESPONSABLE	FECHA
Reconocimiento de los productos potenciales a ser aprovechados	Marcela, Teofila	Mayo 2004
Selección de los productos potenciales a ser aprovechados	Marcela, Teofila	
<i>Selección de técnicas a desarrollar para el aprovechamiento del producto</i>		
• productos en almíbar		
• productos deshidratados		
Búsqueda de contactos para capacitación de técnicas de alimento	Luisa	
Capacitación en las diferentes técnicas	Expertos del cetmar	Mayo, Junio
Organización de grupo	Teofila	Abril
Asignación de tareas	Teofila, Berta, Eliosa	Abril
Inventario de materiales existentes	Todo el grupo	Abril
<i>Adquisición de materiales requeridos</i>	Marcela, Eloisa	Mayo 2004
• <i>envases</i>		
• <i>azúcar</i>		
• <i>hoyas de presión</i>		
<i>Control de calidad de la fruta</i>		
• Selección de la fruta que se va procesar	Teofila, Erica,	
• limpieza	Berta, Cruz	
• almacenamiento	Eloisa, Teofila	
Contactos para comercialización	Luisa, eloisa	
Procesamiento de las frutas por las diferentes técnicas		
• lavado	Manuela	
• selección de la fruta por grado de maduración	Teofila	
• cocimiento de la fruta	Bertha	
• elaboración de almíbar	Eloisa	

• esterilizado	Marcela	
• sellado de envases	Todo el grupo	
• etiquetado	Todo el grupo	
• almacenamiento	Todo el grupo	
Deshidratado de frutas		
• lavado	Ramona	
• selección de la fruta por grado de maduración	Teofila	
• rebanado	Todo el grupo	
• deshidratado	Maniela, teofila	
• empacado	Berta, Eloisa	
• etiquetado	Todo el grupo	
• almacenado	Todo el grupo	
Comercialización del producto	Todo el grupo	
Cuidado de los árboles frutales	Eloisa, Bertha, Teofila	
Siembra de nuevos árboles		

Planes de acción comunitaria del grupo de mujeres de: La Playa, Alvarado.

Dentro del este plan se presentan las diferentes iniciativas que el grupo de La Playa ha venido desarrollando y sus planes a futuro para el 2004.

Dentro de estas iniciativas destacan:

- 1) El cultivo de productos pesqueros, los cuales se iniciaron con mojarra tilapia y actualmente se esta buscando el poder producir especies nativas del humedal, lo cual permita su recuperación.
- 2) Manejo de fauna nativa a través de la producción de jaiba suave y policultivo de jaiba y tilapia en encierros rústicos, estos dos proyectos se encuentran hasta ahora en proceso de evaluación para su aceptación, lo que se espera en dos meses contar con resultados positivos para el desarrollo de los mismos.
- 3) La elaboración de artesanías con lirio acuático
- 4) Cultivo de hortaliza son otro de los proyectos que este grupo consideran como prioritario

A continuación se presenta con mayor detalle los planes de acción comunitaria para este grupo

Plan de acción comunitaria del grupo de mujeres de La Playa

Proyecto: CULTIVO DE PRODUCTOS PESQUEROS

TAREA	RESPONSABLE	FECHA
Conformación del grupo de trabajo	Luisa, Socorro	Julio 2003
<ul style="list-style-type: none"> (listado de integrantes 	Socorro, Elsa	Julio 2003
<ul style="list-style-type: none"> recopilación de firmas, credencial de elector y acta de nacimiento). 	Socorro, Elsa	Julio 2003
Localización mediante prospecciones técnicas de varias alternativas	Marú, Socorro, Elsa, Felisa	Septiembre 2003
<ul style="list-style-type: none"> ubicación de la zona de desarrollo acuacultural y determinación de la mejor alternativa. 	Socorro, Elsa, felisa	Septiembre 2003
Planificación del desarrollo técnico del sistema de acuacultura.	Maru	Septiembre 2003
Integración de permisos y avisos para la instalación de infraestructura acuacultural.	Socorro	Septiembre 2003
Solicitud de permiso por escrito ante el Sr. Cruz, dueño del predio colindante, adjunto a la zona de ubicación del sistema acuacultural.	Maru, Socorro	Septiembre 2003
Limpieza del caño, donde se instalaran las labores acuaculturales.	Todo el grupo	Septiembre 2003
Búsqueda de apoyos y tramite de solicitudes de vinculación con dependencias gubernamentales.	Marú, socorro, Elsa	De Septiembre en adelante
Inscripción de Solicitud para obtención de alimento y alevines, para el cultivo de peces (SEDARPA).	Mar, socorro	Octubre 2003
Solicitud ante colindantes de predios para realizar reforestación de mangle Integración con el Consejo de Desarrollo del Papaloapan (CODEPAP), para mejoramiento del ambiente, mediante siembra de mangle.	Luisa, Maru, Socorro, Gregorio	Octubre 2003
Solicitud de ingreso del grupo a programa de apoyo para obtención del pago de jornales, en atención a la siembra de manglar.	Luisa, Socorro	Octubre 2003
Conformación de una caja de ahorro, para	Todo el grupo	Octubre 2003

solventar gastos relacionados al cultivo de peces.		
Habilitación del área acuacultural (limpieza del caño, colocación de estructuras para protección ante vegetación acuática flotante y basura)	Todo el grupo	Octubre 2003
Aplicación de Talleres de capacitación técnica para la elaboración de jaulas flotantes (diseño aplicado por el Colegio de Posgraduados)	Experto de pronatura y experto del colegio de posgraduados	Noviembre 2003
Elaboración de jaulas	Todo el grupo	Noviembre 2003
Vinculación con programas gubernamentales (INVEDER- CODEPAP)	Maru, Socorro, Elsa, Gregorio	De Septiembre en adelante
Elaboración de cercos de protección	Todo el grupo	Octubre y Nov. 2003
Limpieza de zonas viables para acuacultura	Todo el grupo	Octubre y Nov. 2003
Recepción de alevines	Maru, Socorro, Elsa	Enero 2004
Adquisición de alimentos	Todo el grupo	Enero 2004
Siembra de organismos	Todo el grupo	Enero 2004
Alimentación de organismos	Todo el grupo	
<ul style="list-style-type: none"> • Rol de trabajo para cada uno de los integrantes 	Todo el grupo	Diciembre 2003
<ul style="list-style-type: none"> • Búsqueda de otras alternativas para alimentación de los peces 	Luisa, Maru, Socorro	Desde Enero 2004
<ul style="list-style-type: none"> • Elaboración de harina de pescado 	Todo el grupo	Junio 2004
<ul style="list-style-type: none"> • Capacitación para la elaboración de la harina 	Experto del CETMAR	Junio 2004
<ul style="list-style-type: none"> • Desarrollo de la técnica en la comunidad 	Todo el grupo	Junio 2004

• Elaboración de alimento a través de la lombricultura		Agosto 2004
• Capacitación para la elaboración de alimento a través de la lombricultura		Agosto 2004
• Desarrollo de la técnica en la comunidad		Agosto 2004
Cuidado y seguimiento del proceso de lombricultura		Agosto 2004
• Rol de trabajo	Socorro y Amparo	Junio 2004
Limpieza de jaulas flotantes		
• Rol de trabajo para cada uno de los integrante	Todo el grupo	Diciembre 2003
Vigilancia y seguimiento de crecimiento de la especie		De Enero 2004 en adelante
Selección de especies por tamaño	Todo el grupo	Abril, Mayo, Junio 2004
Cosecha de especies	Todo el grupo	Julio/Agosto 2004
Repartición de especies	Todo el grupo	Julio/Agosto 2004
Seguimiento de actividades	Maru, Luisa, el grupo	Todo el tiempo

Plan de acción comunitaria del grupo de mujeres de La Playa

Proyecto:

MANEJO DE FAUNA NATIVA PRODUCCIÓN DE JAIBA SUAVE y PRODUCCIÓN POLI-CULTIVO DE JAIBA Y TILAPIA y OTRAS ESPECIES NATIVAS

TAREA	RESPONSABLE	FECHA
Vinculación con programas gubernamentales (INVEDER- CODEPAP), para manejo de fauna nativa, mediante manejo de un modulo de producción de jaiba suave y para implementación de poli-cultivo; manejo de fauna nativa (jaiba) y cultivo de tilapia en encierro rustico y par crecimiento de especies de peces nativas en jaulas flotantes.	Maru, Socorro, Elsa, Gregorio	Febrero 2004
Conformación del expediente por parte del grupo, mediante copias de tramites y solicitudes	Maru	Marzo 2004
Elaboración de proyecto	Maru, socorro, Gregorio, Elsa, juliana	Abril 2004
Adquisición de alevines de peces nativos	Maru	Abril 2004
Sometimiento de proyecto para apoyo financiero	Socorro, Gregorio	
Proceso de selección de proyectos		
Seguimiento del proyecto		
Desarrollo del proyecto		

Plan de acción comunitaria del grupo de mujeres de La Playa		
Proyecto: CULTIVO DE HORTALIZAS		
TAREA	RESPONSABLE	FECHA
PLANEACIÓN.		
<i>Organización del grupo</i>	Socorro, Juliana	Enero de 2003
<i>Capacitación en Composta</i>	Luisa y expertos externos	Julio 2003
<i>Capacitación en el cultivo de hortalizas</i>	Luisa y expertos externos	Agosto 2003
<i>Selección del a especies a cultivar</i>	Todo el grupo	Agosto 2003
<ul style="list-style-type: none"> Adquisición de la semilla 	Teofila	Agosto de 2003 Abril 2004
ACTIVIDADES DE CAMPO		
<i>Elaboración de abono orgánico para las hortalizas</i>	Todo el grupo	Julio de 2003
<ul style="list-style-type: none"> Capacitación para la obtención de composta 	Luisa	Julio de 2003
<ul style="list-style-type: none"> Acopio de materia orgánica y material requerido 	Luisa	Julio de 2003
<ul style="list-style-type: none"> Desarrollo de la técnica de compostaje 	Todo el grupo	Julio de 2003
<ul style="list-style-type: none"> Vigilancia y seguimiento del proceso de compostaje 	Todo el grupo	A partir de Julio en adelante
<i>Preparación del terreno</i>		
<ul style="list-style-type: none"> Selección del terreno para la elaboración de las hortalizas 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Desmonte y limpieza del terreno en para cultivo 	Todo el grupo	Por lo menos cada 15 días
<ul style="list-style-type: none"> Resguardo del terreno 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Preparado de la tierra para hortalizas 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Abono de la tierra 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Elaboración de las camas para la siembra de hortalizas 	Todo el grupo	Agosto de 2003

<i>Elaboración de almácigos</i>	Juliana, blanca, socorro	
<i>Trasplante de las plántulas</i>	Todo el grupo	Agosto de 2003 Noviembre 2003 Mayo de 2004
<ul style="list-style-type: none"> Selección de las plántulas más resistentes 	Todo el grupo	Septiembre 2003 Diciembre 2003 Mayo 2004
<ul style="list-style-type: none"> Seccionado del almacigo 	Todo el grupo	
<ul style="list-style-type: none"> Cuidado de las plántulas 	Amparo, Juliana	
<i>Cultivo de hortalizas</i>		
<ul style="list-style-type: none"> Desarrollo de la técnica de cultivo de hortalizas 	Todo el grupo	
<i>Regado de las plántulas</i>	Todo el grupo	Durante todo el proceso
<i>Monitoreo del crecimiento</i>	Todo el grupo	
<i>Reunión de avances y retroalimentación de grupos</i>	Socorro	2 mensuales
<i>Cosecha de los diferentes hortalizas</i>	Todo el grupo	De acuerdo a periodo de siembra
SEGUIMIENTO DEL PROYECTO		
<i>Seguimiento del desarrollo del proyecto</i>	Todo el grupo	Durante todo el año
<i>Búsqueda de nuevas alternativas</i>	Luisa y el grupo	Abril, Mayo de 2004

Plan de acción comunitaria del grupo de mujeres de La Playa

Proyecto: ELABORACIÓN DE ARTESANIAS CON LIRIO ACUÁTICO

TAREA	RESPONSABLE	FECHA
Organización del grupo	Socorro, Elsa	Abril 2004
Inventario de material y mano de obra existente	Todo el grupo	Abril 2004
Asignación de tareas	Luisa, socorro	Mayo 2004
Asesoría para conformación de cooperativa	Socorro	Abril 2004
Conformación de cooperativa	Luisa, socorro, Gregorio	Mayo 2004
Contacto para comercialización del producto	Luisa y socorro	Mayo de 2004
Promoción y difusión del producto		Abril de 2004
Búsqueda de contacto con expertos en elaboración de artesanía	Luisa, Elsa Socorro	Abril, mayo de 2004
Capacitación para la elaboración de artesanía	Grupo experto	Mayo 2004
Selección de la plantas	Todo el grupo	Abril, mayo 2004
Extracción de la planta	Todo el grupo	Abril, mayo 2004
Cortado de la planta	Todo el grupo	Abril, mayo 2004
Limpieza de la planta	Todo el grupo	Abril, mayo 2004
Extracción de la fibra de la planta	Todo el grupo	Abril, mayo 2004
Secado de la planta	Todo el grupo	Abril, mayo 2004
Herborización de las plantas	Todo el grupo	Abril, mayo 2004
Adquisición de maderas para moldes	Juliana, Felisa	Abril, mayo 2004
Elaboración de moldes para artesanías	Socorro, Gregorio, juliana	Abril, mayo 2004
Desarrollo de técnica de tejido de artesanías	Todo el grupo	Mayo de 2004
Reuniones de trabajo	Socorro	Dos por mes
Control de calidad del producto	Juliana, Blanca	A partir de jun.
Inventario de productos terminados	Amparo,	Junio
Comercialización del producto	Todo el grupo	A partir de jun.
Intercambio de experiencias con otros grupos	Todo el grupo	Septiembre
Resguardo del producto terminado	Todo el grupo	Junio
Capacitación a grupos locales	Socorro, Juliana	Noviembre

Planes de acción comunitaria del grupo de mujeres de: Los Cantaros, Alvarado.

Dentro de este grupo se mujeres se destacan tres iniciativas importantes una para dar seguimiento a acciones desarrollarse durante el 2003 y otras para implementarlas durante el 2004:

- 1) El cultivo de hortalizas
- 2) La elaboración de artesanías con lirio acuático
- 3) El cultivo de productos pesqueros.

A continuación se plantea con más detalles los planes a seguir.

Plan de acción comunitaria del grupo de mujeres de Los Cantaros		
Proyecto: CULTIVO DE HORTALIZAS		
TAREA	RESPONSABLE	FECHA
CULTIVO DE HORTALIZAS		
<i>PLANEACIÓN.</i>		
<i>Organización del grupo</i>	Margarita, Nicolasa	Enero de 2003
<i>Capacitación en Composta</i>	Luisa y expertos externos	Julio 2003
<i>Capacitación en el cultivo de hortalizas</i>	Luisa y expertos externos	Agosto 2003
<i>Selección del a especies a cultivar</i>	Todo el grupo	Agosto 2003
<ul style="list-style-type: none"> Adquisición de la semilla 	Teofila, Luisa	Agosto de 2003 Abril 2004
<i>ACTIVIDADES DE CAMPO</i>		
<i>Elaboración de abono orgánico para las hortalizas</i>	Todo el grupo	Julio de 2003
<ul style="list-style-type: none"> Capacitación para la obtención de composta 	Luisa	Julio de 2003
<ul style="list-style-type: none"> Acopio de materia orgánica y material requerido 	Luisa	Julio de 2003
<ul style="list-style-type: none"> Desarrollo de la técnica de compostaje 	Todo el grupo	Julio de 2003
<ul style="list-style-type: none"> Vigilancia y seguimiento del proceso de compostaje 	Todo el grupo	Julio de 2003
<i>Preparación del terreno</i>		
<ul style="list-style-type: none"> Selección del terreno para la elaboración de 	Todo el grupo	Agosto de 2003

las hortalizas		
<ul style="list-style-type: none"> Desmante y limpieza del terreno en para cultivo 	Todo el grupo	Por lo menos cada 15 días
<ul style="list-style-type: none"> Resguardo del terreno 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Preparado de la tierra para hortalizas 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Abono de la tierra 	Todo el grupo	Agosto de 2003
<ul style="list-style-type: none"> Elaboración de las camas para la siembra de hortalizas 	Todo el grupo	Agosto de 2003
<i>Elaboración de almácigos</i>	Araceli, Margarita, Nicolasa	
<i>Trasplante de las plántulas</i>	Todo el grupo	Agosto de 2003 Noviembre 2003 Mayo de 2004
<ul style="list-style-type: none"> Selección de las plántulas más resistentes 	Todo el grupo	Septiembre 2003 Diciembre 2003 Mayo 2004
<ul style="list-style-type: none"> Seccionado del almacigo 	Nicolasa, Araceli	
<ul style="list-style-type: none"> Cuidado de las plantulas 	Nicolasa, Araceli	
<i>Cultivo de hortalizas</i>		
<ul style="list-style-type: none"> Desarrollo de la técnica de cultivo de hortalizas 	Todo el grupo	
<i>Regado de las plántulas</i>	Todo el grupo	Durante todo el proceso
<i>Monitoreo del crecimiento</i>	Todo el grupo	
<i>Reunión de avances y retroalimentación de grupos</i>	Margarita	2 mensuales
<i>Cosecha de los diferentes hortalizas</i>	Todo el grupo	De acuerdo a periodo de siembra
SEGUIMIENTO DEL PROYECTO		
<i>Seguimiento del desarrollo del proyecto</i>	Todo el grupo	
<i>Búsqueda de nuevas alternativas</i>	Luisa y el grupo	

Plan de acción comunitaria del grupo de mujeres de Los Cantaros

Proyecto: CULTIVO DE PRODUCTOS PESQUEROS

TAREA	RESPONSABLE	FECHA
<i>Conformación del grupo de trabajo</i>	Luisa,	Julio 2003
• listado de integrantes	Nicolasa	Julio 2003
• recopilación de firmas, credencial de elector y acta de nacimiento).	Nicolasa	Julio 2003
<i>Localización mediante prospecciones técnicas de varias alternativas</i>	Marú, Nicolasa, Margarita	Septiembre 2003
• ubicación de la zona de desarrollo acuacultural y determinación de la mejor alternativa.	Marú, Nicolasa, Margarita	Septiembre 2003
<i>Planificación del desarrollo técnico del sistema de acuacultura.</i>	Maru	Septiembre 2003
<i>Integración de permisos y avisos para la instalación de infraestructura acuacultural.</i>	Todo el grupo	Septiembre 2003
<i>Solicitud de permiso por escrito ante el Sr. Cruz, dueño del predio colindante, adjunto a la zona de ubicación del sistema acuacultural.</i>	Maru y el grupo	Septiembre 2003
<i>Limpieza del caño, donde se instalaran las labores acuaculturales.</i>	Todo el grupo	Septiembre 2003
<i>Búsqueda de apoyos y tramite de solicitudes de vinculación con dependencias gubernamentales.</i>	Marú, Margarita, Nicolasa	De Septiembre en adelante
<i>Inscripción de Solicitud para obtención de alimento y alevines, para el cultivo de peces (SEDARPA).</i>	Maru	Octubre 2003
<i>Solicitud ante colindantes de predios para realizar reforestación de mangle Integración con el Consejo de Desarrollo del Papaloapan (CODEPAP), para mejoramiento del ambiente, mediante siembra de mangle.</i>	Luisa, Araceli, Nicolasa	Octubre 2003
<i>Solicitud de ingreso del grupo a programa de apoyo para obtención del pago de jornales, en atención a la siembra de manglar.</i>	Luisa,	Octubre 2003
<i>Conformación de una caja de ahorro, para solventar gastos relacionados al cultivo de peces.</i>	Todo el grupo	Octubre 2003
<i>Habilitación del área acuacultural (limpieza del caño, colocación de estructuras para protección ante vegetación acuática flotante y basura)</i>	Todo el grupo	Octubre 2003

<i>Aplicación de Talleres de capacitación técnica para la elaboración de jaulas flotantes (diseño aplicado por el Colegio de Posgraduados</i>	Experto Pronatura experto colegio posgraduados de y del de	Noviembre 2003
<i>Elaboración de jaulas</i>	Todo el grupo	Noviembre 2003
<i>Vinculación con programas gubernamentales (INVEDER- CODEPAP)</i>	Maru	De Septiembre en adelante
<i>Elaboración de cercos de protección</i>	Todo el grupo	Octubre y Nov. 2003
<i>Limpieza de zonas viables para acuacultura</i>	Todo el grupo	Octubre y Nov. 2003
<i>Recepción de alevines</i>	Maru, Nicolasa, Araceli	Enero 2004
<i>Adquisición de alimentos</i>	Todo el grupo	Enero 2004
<i>Siembra de organismos</i>	Todo el grupo	Enero 2004
<i>Alimentación de organismos</i>	Todo el grupo	
• Rol de trabajo para cada uno de los integrantes	Todo el grupo	Diciembre 2003
• Búsqueda de otras alternativas para alimentación de los peces		Desde Enero 2004
• Elaboración de harina de pescado	Todo el grupo	Junio 2004
• Capacitación para la elaboración de la harina	Experto CETMAR del	Junio 2004
• Desarrollo de la técnica en la comunidad	Todo el grupo	Junio 2004
• Elaboración de alimento a través de la lombricultura		Agosto 2004
• Capacitación para la elaboración de alimento a través de la lombricultura		Agosto 2004
• Desarrollo de la técnica en su comunidad		Agosto 2004

<i>Cuido y seguimiento del proceso de lombricultura</i>		
<ul style="list-style-type: none"> • Rol de trabajo 	Nicolasa, Emiliano	Junio 2004
<i>Limpieza de jaulas flotantes</i>		
<ul style="list-style-type: none"> • Rol de trabajo para cada uno de los integrante 	Todo el grupo	Diciembre 2003
<i>Vigilancia y seguimiento de crecimiento de la especie</i>		De Enero 2004 en adelante
<i>Selección de especies por tamaño</i>	Todo el grupo	Abril, Mayo, Junio 2004
<i>Cosecha de especies</i>	Todo el grupo	Julio/Agosto 2004
<i>Repartición de especies</i>	Todo el grupo	Julio/Agosto 2004
<i>Seguimiento de actividades</i>	Maru, Luisa, el grupo	Todo el tiempo

Plan de acción comunitaria del grupo de mujeres de Los Cantaros

Proyecto: ELABORACIÓN DE ARTESANIAS CON LIRIO ACUÁTICO

TAREA	RESPONSABLE	FECHA
Organización del grupo	Nicolasa	Abril 2004
Inventario de material y mano de obra existente	Todo el grupo	Abril 2004
Asignación de tareas	Luisa, margarita	Mayo 2004
Asesoría para conformación de cooperativa	Socorro	Abril 2004
Conformación de cooperativa	Luisa, Araceli	Mayo 2004
Contacto para comercialización del producto	Luisa y socorro	Mayo de 2004
Promoción y difusión del producto		Abril de 2004
Búsqueda de contacto con expertos en elaboración de artesanía	Luisa, Nicolasa, Araceli	Abril, mayo de 2004
Capacitación para la elaboración de artesanía	Grupo experto	Mayo 2004
Selección de la plantas	Todo el grupo	Abril, mayo 2004
Extracción de la planta	Todo el grupo	Abril, mayo 2004
Cortado de la planta	Todo el grupo	Abril, mayo 2004
Limpieza de la planta	Todo el grupo	Abril, mayo 2004
Extracción de la fibra de la planta	Todo el grupo	Abril, mayo 2004
Secado de la planta	Todo el grupo	Abril, mayo 2004
Herborización de las plantas	Todo el grupo	Abril, mayo 2004
Adquisición de maderas para moldes	Juliana, Felisa	Abril, mayo 2004
Elaboración de moldes para artesanías	Emiliano, Araceli, Incolaza	Abril, mayo 2004
Desarrollo de técnica de tejido de artesanías	Todo el grupo	Mayo de 2004
Reuniones de trabajo	Socorro	Dos por mes
Control de calidad del producto	Juliana, Blanca	A partir de jun.
Inventario de productos terminados	Amparo,	Junio
Comercialización del producto	Todo el grupo	A partir de jun.
Intercambio de experiencias con otros grupos	Todo el grupo	Septiembre
Resguardo del producto terminado	Todo el grupo	Junio
Capacitación a grupos locales	Socorro, Juliana	Noviembre

Appendix 4: Photographic Memory

Workshop in organic waste management:



Meeting to complete community profiles and systematize action plans:



Meetings about community gardening and first crops:



Follow up meetings to share results in Costa de la Palma



The first squash and Maize plants at Doña Teofila's garden in Costa de la Palma



Watermelons and Papayas at Costa de la Palma

Community gardening and aquaculture activities:



Meeting about fisheries and first river beds cleaning actions:



Meeting at La Playa to talk about needed permits and paperwork to implement an aquaculture project

Preparing a river branch to build in the aquaculture project La Playa



Eloisa and Berta going by boat to feed the fish



Jumping fish at one of the floating cages at La Playa

Visit to Catemaco women's community group who work with water lilies arts and crafts:

